

Office of Research and Development National Health and Environmental Effects Research Laboratory

Mid-Continent Ecology Division (MED)

JO A. THOMPSON

U.S. Environmental Protection Agency
National Health and Environmental Effects Research Laboratory
Mid-Continent Ecology Division - Duluth
6201 Congdon Boulevard
Duluth, Minnesota 55804
218-529-5198
thompson.jo@epa.gov

(revised 06/14/01)

EDUCATION

<u>Degree</u>	<u>Year</u>	<u>Major</u>	Institution
M.S.	1992	Environmental Biology	University of Minnesota, Duluth
B.S.	1988	Aquatic Biology	University of Wisconsin, Stevens Point

EXPERIENCE

Aquatic Research Biologist

<u>Dates</u> <u>Employer</u>

1995 - Present U.S. Environmental Protection Agency

6201 Congdon Blvd.

Duluth, MN

Brief Description of Position: Conduct scientific research on aquatic ecosystems by conducting field and laboratory experiments, compiling and analyzing data, and presenting data in the form of reports, journal articles, and public presentations; contribute to planning, organizing, and preparation of research tasks and strategies which meet agencies objectives; collaborates on research needs with other divisions through work groups; maintain technical relationships with the scientific and professional community and representatives of clients to enhance program relevance, credibility, and support, participate in in-house programs and outreach activities to communicate goals, objectives, plans, and research activities to representatives within the agency, other agencies, and the public.

Biology Research Supervisor

<u>Dates</u> <u>Employer</u>

1993 - 1995 Integrated Laboratory Systems

RTP, NC

<u>Brief Description of Position:</u> Provided on-site support to the Environmental Protection Agency's Environmental Research Laboratory in Duluth under the Toxicological and Ecological Research Support contract. Responsible for the technical oversight of five work assignments which include: aquatic organism culture support, global climate change fish/temperature database support, wetland function field and laboratory support, landscape ecocriteria support, and a sediment toxicology support.

Biologist

<u>Dates</u> <u>Employer</u>

1992 - 1993 AScI Corporation-Duluth Environmental Testing Division

<u>Brief Description of Position:</u> Aquatic toxicity testing including toxicity studies of new products, acute and chronic toxicity evaluations of effluents and sediment porewaters, performance of routine water chemistry analysis on samples, and installation and maintenance of laboratory apparatus and testing equipment.

Research Biologist

<u>Dates</u> <u>Employer</u>

1990 - 1992 AScI Corporation

<u>Brief Description of Position:</u> Member of a research team of the National Effluent Toxicity Assessment Center (NETAC) at the Environmental Protection Agency's Environmental Research Laboratory in Duluth to develop methods for toxicity identification evaluations in municipal and industrial effluents.

Graduate Research Assistant

Dates Employer

1989 - 1990 University of Minnesota, Duluth

<u>Brief Description of Position:</u> Cooperative agreement between the University of Minnesota-Duluth and the EPA Environmental Research Lab-Duluth to do research in algal toxicity testing and perform algal toxicity tests on river basin studies being conducted through ERL-D.

Graduate Teaching Assistant

<u>Dates</u> <u>Employer</u>

1988 - 1990 University of Minnesota, Duluth

<u>Brief Description of Position:</u> Preparation and instruction of general biology laboratories at the University of Minnesota-Duluth.

AWARDS, HONORS AND GRANTS

Outstanding Graduate Teaching Assistant Award at the University of Minnesota-Duluth (1990)

The Neinke Water Chemistry Scholarship (1988)

Nomination to receive the Academic All-American Collegiate Award (1988)

The National Collegiate Natural Resources Management Award (1987)

The Ore Ida Scholarship (1987)

Distinction in Biology, Distinction in Chemistry, and the Thomas Jacob Environmental Studies at the University of Wisconsin (1986)

PROFESSIONAL SOCIETIES

North American Benthological Society International Society for Diatom Research Phycological Society of America

PUBLICATIONS

Peer-Reviewed Journals

Detenbeck, N.E., S.L. Batterman, V.J. Brady, J.C. Brazner, V.M. Snarski, D.L. Taylor, J.A. Thompson, and J.W. Arthur. 2000. A test of watershed classification systems for ecological risk assessment. *Environ. Toxicol. Chem.* 19:1174-1181.

Thompson, J.A. 1997. Cellular fluorescence capacity as an endpoint in algal toxicity testing. *Chemosphere* 35:2027-2037.

EPA Reports

Arthur, J.W., T.H. Roush, J. A. Thompson, C.T. Walbridge, and F.A. Puglisi. 1997. Evaluation of low order stream quality in Central Iowa. EPA/600/R-97/009. U.S. Environmental Protection Agency, Duluth, MN.

Arthur, J.W., T. Roush, J.A. Thompson, F.A. Puglisi, C. Richards, G.E. Host, and L.B. Johnson. 1995. Evaluation of watershed quality in the Saginaw River basin. EPA/600/R-95/153. U.S. Environmental Protection Agency, Duluth, MN.

Arthur, J.W., J. Thompson, C.T. Walbridge, and H.W. Read. 1993. Ambient toxicity assessments in the Minnesota River basin. Progress report to the Legislative Commission, Minnesota Resources. EPA ERL-D Internal Report 2737.

Norberg-King, T. J., D. I. Mount, J. R. Amato, D. A. Jensen, and J. A. Thompson. 1992. Toxicity identification evaluation: Characteristics of chronically toxic effluents - Phase I. EPA-600/6-91/005F. U.S. Environmental Protection Agency, Duluth, MN.

Thompson, J. A., D. A. Jensen, and J. R. Amato. 1991. Bergen County toxicity identification evaluation. NETAC Technical Report 02-91.

Thompson, J. A., D. A. Jensen, T. J. Norberg-King, D. I. Mount, and S. E. Baker. 1991. Chronic toxicity reduction evaluation study, Bergen County Utilities Authority, April. NETAC Technical Report 11-91.

Thompson, J. A., T. J. Norberg-King, T. Dawson, M. K. Schubauer-Berigan, G. S. Peterson, J. J. Jenson, J. R. Dierkes, and S. E. Baker. 1991. Chronic toxicity reduction evaluation study, Bergen County Utilities Authority, May. NETAC Technical Report 12-91.

Thompson, J. A., T. J. Norberg-King, T. Dawson, P. Monson, G. S. Peterson, D. A. Jensen, and S. E. Baker. 1991. Chronic toxicity reduction evaluation study, Bergen County Utilities Authority, June. NETAC Technical Report 13-91.

Thompson, J. A., T. J. Norberg-King, T. Dawson, P. Monson, G. S. Peterson, D. A. Jensen, and S. E. Baker. 1991. Chronic toxicity reduction evaluation study, Bergen County Utilities Authority, July-August. NETAC Technical Report 14-91.

Norberg-King, T. J., J. A. Amato, D. A. Jensen, D. I. Mount, and J. Thompson. 1991. Toxicity test information with the additives used in the chronic toxicity identification evaluations for *Ceriodaphnia dubia* and *Pimephales promelas*. NETAC Technical Report 01-91.

Norberg-King, T. J., D. I. Mount, and J. A. Thompson. 1991. Summary report: Bergen County toxicity reduction evaluation toxicity test results and the Phase I and II chronic toxicity identification evaluations results, September. NETAC Technical Report 15-91.

Norberg-King, T. J., J. Thompson, N. Englehorn, and G.S. Peterson. 1990. Combined sewer overflow freshwater toxicity test results from August 8, 1990, August 19, 1990 and September 17, 1990. NETAC Technical Report 21-90.

INVITED PRESENTATIONS

Thompson, J.A. 1998. Variability in diatom community structure between heterogenous habitats in a wooded stream in the western Lake Superior watershed. Proceedings of the 86th Annual Aquatic Workshop, Prince Edward Island, Canada, June 2-5.

Thompson, J.A., D.L. Taylor, and A.R. Carlson. 1997. Diatoms as an indicator of sedimentation in western Lake Superior streams. Poster presentation. 14th North American Diatom Symposium, Douglas Lake MI, September.

Arthur, J.W., Thompson, J.A., and F.A. Puglisi. 1996. Toxicity assessments from four midwestern watersheds: The influence of sediment pore water ammonia. Poster presentation. Midwest SETAC, Duluth, MN, April 3-5.

Thompson, J.A., J.W. Arthur, and T. Roush. 1995. Evaluation of benthic macroinvertebrate communities in agricultural low order streams in central Iowa. Poster presentation. 10th Annual U.S. Landscape Symposium, April.

Thompson, J. A. 1991. Algal toxicity testing. U.S. EPA TIE Workshop, Dallas, TX, October.

FIRST AUTHOR ABSTRACTS

Thompson,, J.A. 1997. Cellular fluorescence capacity as an endpoint in algal toxicity testing. *Chemosphere* 35:2027-2037.

Thompson, A.J.W., J.A. Thompson, and F.A. Puglisi. 1996. Toxicity assessments from four midwestern watersheds: The influence of sediment pore water ammonia. Poster presentation. Midwest SETAC, April.

Thompson, J.A., J.W. Arthur, and T. Roush. 1995. Evaluation of benthic macroinvertebrate communities in agricultural low order streams in central Iowa. Poster presentation. 10th Annual U.S. Landscape Symposium, April.

Thompson, J. A., G. S. Peterson, M. K. Schubauer-Berigan, T. J. Norberg-King, J. R. Amato, J. J. Jenson, and D. I. Mount. 1991. Techniques available for graduated pH tests in characterizing the causes(s) of toxicity. Poster presentation. SETAC, November.

OTHER

Masters Thesis

Thompson, J. A. 1992. Cellular fluorescence capacity as an end point in algal toxicity tests. University of Minnesota, Duluth, MN.

Reports

Arthur, J.W., J.A. Thompson, C.T. Walbridge, and H.W. Read. 1994. Ambient toxicity assessments in the Minnesota River basin. In: *Minnesota River Assessment Project Report, Volume III. Biological and Toxicological Assessment*. Report to the Legislative Commission on Minnesota Resources, Minnesota Pollution Control Agency, January, Report. No. 4.

Presentations

Detenbeck, N.E., V.A. Brady, J.C. Brazner, M.F. Moffett, V.M. Snarski, and J.A. Thompson. 2001. The role of watershed classification in diagnosing causes of biological impairment. USEPA/NSF/USDA Water and Watersheds Program Review, San Francisco, CA, April 17-19.

Angradi, T.R., D.W. Bolgrien, E.W. Schweiger, J.R. Kelly, J.V. Scharold, J.A. Thompson, C.W. West, S.E Miller, and T.D. Corry. 2001. Upper Missouri River Environmental Monitoring and Assessment Program (EMAP-UMR): A robust design for a great-river assessment. North American Benthological Society, LaCrosse, WI, June 3-8.

Bolgrien, D.W., T.R. Angradi, J.V. Scharold, E.W. Schweiger, and J.A. Thompson. 2000. The EPA's Upper Missouri River environmental monitoring and assessment program. South Dakota Environmental Professionals Association Conference, Oacoma, SD, October 18-19.

Detenbeck, N.J., S. Brazner, V. Snarski, D. Tanner, D. Taylor, and J. Thompson. 1997. Lake Superior comparative watershed study: A framework for evaluating the impacts of forest fragmentation on north and south shore streams. Poster presentation. 59th Midwest Fish and Wildlife Conference, Milwaukee WI, December.

Jensen, D. A., T. J. Norberg-King, G. S. Peterson, and J. A. Thompson. 1992. Use of toxicity identification evaluations (TIES) for chronically toxic freshwater effluents. Platform presentation. ASTM Environmental Toxicology and Risk Assessment: Aquatic, Plant, and Terrestrial Meeting, Pittsburgh, PA, April 26-30.

Jensen, D. A., J. A. Thompson, T. J. Norberg-King, D. I. Mount, and J. R. Amato. 1991. Application of TIE techniques to chronically toxic effluents. Platform presentation. Society of Environmental Toxicology and Chemistry Meeting, Seattle, WA, November 3-7.

Thompson, J. A., G. S. Peterson, M. K. Schubauer-Berigan, T. J. Norberg-King, J. R. Amato, J. J. Jenson, and D. I. Mount. 1991. Techniques available for graduated pH tests in characterizing the causes(s) of toxicity. Poster presentation. SETAC, November.

Barnidge, D., D. Brook, G. Elonen, M. Hoglund, M. Kahl, G. Mielke, J. Thompson, S. Broderius, and C. Russom. 1990. Toxicity of eight terpenes to fathead minnows (*Pimephales promelas*), daphnids (*Daphnia magna*), and algae (*Selenastrum capricornutum*). Joint report by AScI Corporation and the U.S. EPA Environmental Research Laboratory-Duluth to the Office of Toxic Substances, January.